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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,844	06/26/2001	Kyle M. Hanson		4760

25096 7590 05/19/2003

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EXAMINER

VALENTINE, DONALD R

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 05/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,844

Applicant(s)

HANSON, KYLE M.

Examiner

Donald R. Valentine

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 is/are allowed.
- 6) ☒ Claim(s) 17, 19, 22, 25 and 27 is/are rejected.
- 7) ☒ Claim(s) 18, 20, 21, 23, 24, 26, 28 and 29 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 17, 19, 22, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al.

Peterson et al show apparatus with a roller box, also a cleaning station which are considered by the examiner as process containers adapted to hold fluid to process workpieces. The reference shows a cassette for holding workpieces, said cassette being considered to be a “work holder”. (See col. 2, lines 5-52; and col. 3,

lines 45-54). The reference shows workpiece sensors, which detect the absence or presence of a workpiece. The apparatus is configured to generate an alarm or stop the operation in response to the detection of the presence or absence of workpieces. (See col. 8, lines 3-23). (See also Col. 16, lines 7-28; col. 17, lines 20-46 and col. 18, lines 11-30).

The reference does not show microelectronic components, however, applicants' disclose semiconductor wafers which are synonymous with microelectronic components and which are inherently considered to be the wafers disclosed by the reference.

It would be considered within the skill of the art to modify the reference to include an electronic or electromagnetic detection system for detecting presence or absence of workpieces because the reference disclosed optical sensors, which appear to be in common with, or synonymous with applicants' disclosed optical detectors.

4. Claims 17, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzalez-Martin et al.

Gonzalez-Martin et al show apparatus with a series of processing stations for processing of workpieces (semiconductor wafers) by various operations, e.g. polishing and/or cleaning and rinsing. These stations, by their nature, appear to

require a processing container, especially in view of the reference disclosure of the presence of fluids. (Col. 11, lines 20-28 and lines 64-67). The reference shows a cassette for holding workpieces, said cassette being considered to be a “work holder”. (See col. 5, lines 40-65). The reference shows workpiece sensors, which detect the absence or presence of a workpiece. (See col. 6, lines 50-60; and col. 7, lines; and col. 11, lines 30-50). The apparatus is configured to generate an alarm or stop the operation in response to the detection of the presence or absence of workpieces.

The reference does not show microelectronic components, however, applicants’ disclose semiconductor wafers which are synonymous with microelectronic components and which are inherently considered to be the wafers disclosed by the reference.

It would be considered within the skill of the art to modify the reference to include an electronic or electromagnetic detection system for detecting presence or absence of workpieces because the reference discloses optical sensors, which appear to be that which are synonymous with applicant’s disclosed optical detectors.

Allowable Subject Matter

5. Claim 30 is allowed.

6. Claims 18, 20-21, 23-24, 26 and 28-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The references of record do not show or suggest apparatus comprising electrolytic deposition means, workpiece detection means for detecting presence or absence of workpieces at the electrodeposition means and means for controlling the handling of wafers in the apparatus in response to the workpiece detection means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R. Valentine whose telephone number is 703-308-3327. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink that reads "Donald R. Valentine". The signature is written in a cursive style with a large, stylized 'D' and 'V'.

Donald R. Valentine
Primary Examiner
Art Unit 1742

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May 15, 2003